

Amendment to the Claims:

This listing of claims will replace all prior versions, and listing of claims in the application. Claims 1-2, 4-5, 18-20 and 22 have been amended, Claim 14 has been cancelled and Claim 27 has been added.

Listing of Claims:

1. (Currently Amended) A method of embedding a signature in an audio-visual signal for authentication of said audio-visual signal, said signal being comprised of a plurality of sequential frames, each of said plurality of sequential frames being comprised of at least two frame portions, the method comprising the steps of:

storing a first field frame portion of a frame of said audio-visual signal, thereby allowing for a reduced memory requirement relative to storing an entire frame of said audio-visual signal,

calculating a signature based on ~~a~~ the stored first frame portion field of ~~a~~ said frame of said audio-visual signal,

embedding the signature in one of said at least two frame portions first field of said frame ~~or a second field of said frame~~ of said audio-visual signal.

2. (Currently Amended) A method according to claim 1, wherein said at least two frame portions first and second fields of said frame of said audio-visual signal respectively comprise patterns of horizontal lines of said audio-visual signal frame.

3. (Previously Presented) A method according to claim 1, whereby said steps of calculating and embedding are repeated until a said signature is embedded for all regions of said frame.
4. (Currently Amended) A method according to claim 1, whereby said at least two frame portions first field of said audio-visual signal ~~comprises~~ comprise a slice of at least one consecutive line of a plurality of horizontal lines comprising said frame of said audio-visual signal and said second field is a field comprising a slice of at least one consecutive horizontal line of a plurality of said horizontal lines comprising ~~of~~ said frame of said audio-visual signal.
5. (Currently Amended) A method according to claim 4 whereby said audio-visual signal is an interlaced signal and said first field portion comprises one of all even or odd lines and said second field portion comprises all remaining odd or even lines not included in said first field portion.
6. (Previously Presented) A method according to claim 1 whereby said audio-visual signal is a non-interlaced signal and said first and second fields comprise consecutive slices of said audio-visual signal, wherein each of said consecutive slices are further comprised of at least one consecutive line of said frame.

7. (Previously Presented) The method according to claim 1, wherein the embedded signature comprises a watermark.
8. (Original) The method according to claim 7 whereby the watermark is embedded as a spread spectrum watermark.
9. (Original) The method according to claim 7, whereby the watermark is embedded in a different portion of said frame than the portion of said frame for which said signature is generated.
10. (Cancelled)
11. (Previously Presented) The method according to claim 1 whereby the steps of calculating and embedding said signature are performed in real-time.
- 12-16 (Cancelled)
17. (Previously Presented) The method according to claim 1, wherein the first and second portions are selected based on said audio-visual signal being one of an interlaced or a non-interlaced signal.

18. (Currently Amended) The method according to claim 17, in the case wherein said audio-visual signal is said interlaced signal, said first field portion comprising an upper field of said single frame of said audio-visual signal and said second field portion comprising a lower field of said single frame audio-visual signal.

19. (Currently Amended) The method according to claim 18, wherein said upper and lower fields portions comprise patterns of horizontal lines of said audio-visual signal, each of said respective patterns of horizontal lines having fewer lines than the entire audio-visual signal.

20. (Currently Amended) The method according to claim 17, in the case wherein said audio-visual signal is said non-interlaced signal, said first field portion comprising an upper half of said frame of said audio-visual signal and said second field portion comprising a lower half of said single frame in the case.

21. (Previously Presented) The method according to claim 20, wherein each of said upper and lower halves of said frame comprise patterns of horizontal lines of said audio-visual signal, said respective patterns having fewer lines than the entire audio-visual signal.

22. (Currently Amended) An apparatus for embedding a signature in an audio-visual signal for authentication of said audio-visual signal, said signal being comprised of a plurality of sequential frames, each of said plurality of sequential frames being comprised of at least two frame portions, the apparatus comprising:

means for storing a first portion of a frame of said audio-visual signal in a memory, thereby allowing for a reduced memory requirement relative to storing an entire frame of said audio-visual signal,

means for calculating a signature based on the stored first portion of said frame of said audio-visual signal, and

means for embedding the signature in one of said first portion of said frame or a second portion of said frame of said audio-visual signal.

23. (Previously Presented) The apparatus of Claim 22, wherein said means for calculating and means for embedding are performed while said first portion is stored in said memory storage device.

24. (Previously Presented) An apparatus according to claim 23, wherein said first and second portions comprise -patterns of horizontal lines of said audio-visual signal, said patterns having fewer lines than the entire audio-visual signal.

25. (Previously Presented) The apparatus according to Claim 22, wherein said apparatus is a camera.

26. (Previously Presented) The apparatus according to Claim 25, wherein the camera is selected from the group consisting of: a surveillance camera, a security camera, a digital video camera and a medical imaging camera.

27. (New) A computer readable media having thereon the following computer-executable instructions for:

storing a first portion of a frame of an audio-visual signal, wherein said frame is comprised of at least two frame portions, thereby allowing for a reduced memory requirement,

calculating a signature based on the stored first frame portion, and
embedding the signature in one of said at least two frame portions of said frame of said audio-visual signal.